In claim 9, line 14, delete "provide" and insert therefor -- for providing --.

In claim 10, line 1, delete "overlay control circuitry" and insert therefor -- controller --.

In claim 11, line 1, delete "overlay control circuitry" and insert therefor -- controller --.

/ 312. (Twice Amended) A controller comprising:

selected one of on-screen and off-screen memory spaces of a frame buffer;

a first port for receiving video and graphics data, a word of said data received with an address of said memory spaces directing said word to be processed as a word of video data or a word of graphics data;

a second port for receiving real-time video data;

circuitry for generating an address associated with a selected one of said memory spaces for a word of said real-time video data;

[circuitry for writing selectively each word of data into a selected one of on-screen and off-screen memory spaces of a frame buffer;]

circuitry for selectively retrieving said words of data from said onscreen and off-screen <u>memory</u> spaces as data is rastered for driving a display;

a graphics backend pipeline for processing ones of said words of data representing graphics data retrieved from said frame buffer;

a video backend pipeline for processing other ones of said words of data representing video data retrieved from said frame buffer, said circuitry for retrieving always rastering a stream [words] of data from said frame buffer to said graphics backend pipeline and rastering video data to said video backend pipeline when a display raster scan reaches a display position of a window; and

output selector circuitry for selecting for output between words of data output from said graphics backend pipeline and words of data output from said video backend pipeline.



(Amended) The controller of Claim [13] 22 wherein said output selector is operable to:

in a first mode, pass only a word of data output from said graphics pipeline;

in a second mode, pass a word of data output from said video pipeline when said display raster scan has reached a display position corresponding to a window and a word of data from said graphics pipeline [otherwise] when said display raster scan is in any other display position;

in a third mode, pass a word of data output from said video pipeline when said display raster scan has reached a display position corresponding to a window and a corresponding word of data from said graphics pipeline matches a color key and a word of data from said graphics pipeline [otherwise] when said display raster scan is in any other display position; and

in a fourth mode, pass a word of data from said video pipeline when said [a] corresponding word of data from said graphics pipeline matches a color key and a word of data from said graphics pipeline [otherwise] when said display raster scan is in any other display position.

(Amended) The controller of claim wherein said output selector circuitry comprises:

a control selector having a plurality of [data] <u>control</u> inputs coupled to a register, said register storing a plurality of overlay control bits;

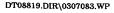
window position control circuitry coupled to a first control input of said control selector, said window position control circuitry operable to selectively provide a first control signal to said first control input when a word of data being pipelined through said video pipeline falls within a display window;

color comparison circuitry operable to compare a word of data being pipelined through said graphics pipeline with a color key and provide in response a second control signal to a second control input of said control selector; and

wherein said control selector is operable to provide an output selection control signal [to said control input of said output selector] in response to at least

3





one of said first and second control signals and said overlay control bits being stored in said register.

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(Amended) The circuitry of claim 1 wherein said output selector circuitry further includes a third control input coupled to certain bits [a second output] of said graphics pipeline, said output selector further operable to select between data [pipeline] on said respective video and graphics pipelines in response to said certain bits [a bit] presented [at a second control input] to said [output] selector circuitry.

Claim 30, line 7, after the word "from" delete "said" therefrom.

34

(Amended) The [system] controller of claim 1 wherein said [port comprises] interface includes a dual-aperture port.

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51